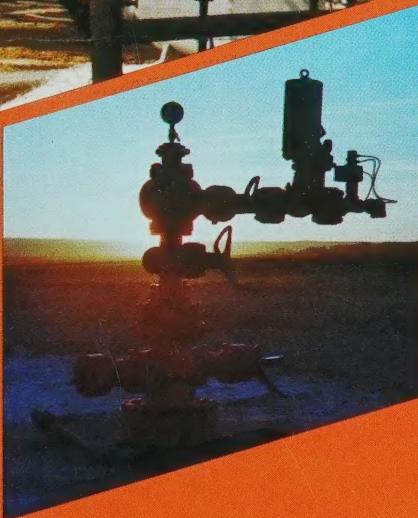
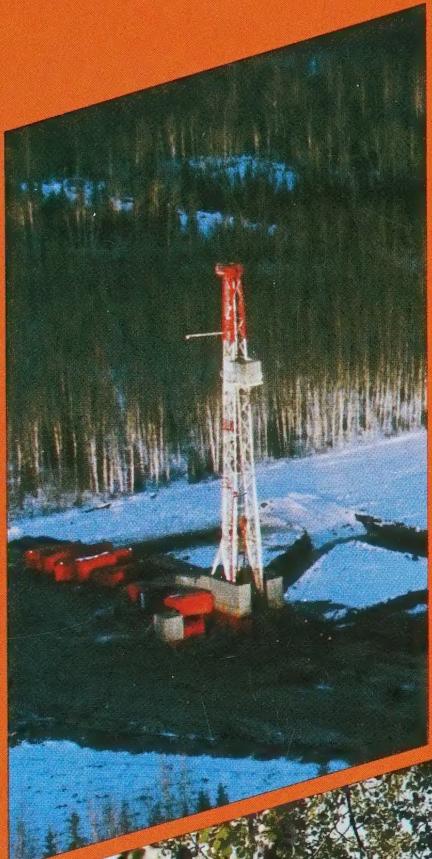
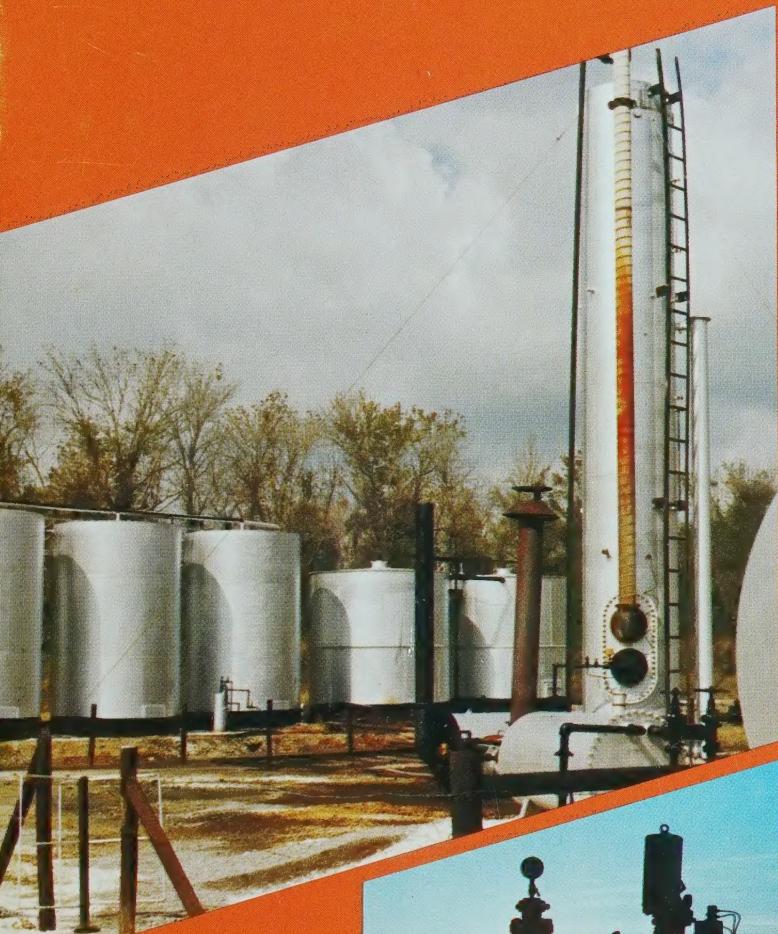




Canadian Hidrogas Resources Ltd.

1977 Annual Report



Directors:

Evan W. G. Bodrug
Arthur F. Coady
Larry S. Heald
Robert C. Jeal
Benjamin J. McConnell
Robert E. McLennan

Officers:

Evan W. G. Bodrug — Chairman of the Board
Robert E. McLennan — President
Robert C. Jeal — Controller
Larry S. Heald — Secretary

Senior Personnel:

A. Rodger White — Geologist
Gary Follensbee — Engineer
Fred Kubista — Office Manager and Purchasing
Paul D. Yeoman — Manager of Operations
Darwin Dean — Field Superintendent, Lloydminster

Head Office:

Suite 1000
610 - 8th Avenue S.W.
Calgary, Alberta T2P 1G5

Transfer Agent:

National Trust Company Limited
Calgary, Toronto and Vancouver

Bank:

Bank of Montreal
Calgary, Alberta

Auditors:

Deloitte, Haskins & Sells

Shares Listed:

(Share symbol — CHS)
Toronto Stock Exchange
Vancouver Stock Exchange
Alberta Stock Exchange

highlights:

Financial:

	<u>1977</u>	<u>1976</u>
Sales and operating revenues	\$4,399,000	\$3,813,000
Cash flow from operations	\$ 944,000	\$ 698,000
Per share	34¢	26¢
Net income before extraordinary items	\$ 372,000	\$ 243,000
Per share	13¢	9¢
Net income (loss)	\$ 439,000	\$ (315,000)
Per share	16¢	(12¢)
Exploration and development expenditures	\$2,135,000	\$1,200,000
Shares outstanding	2 853 939	2 723 139

Operational:

Crude oil production — barrels	381 000	410 000
Daily average	1 045	1 125
Natural gas production — mcf	602 000	547 000
Daily average	1 650	1 500
Proven and probable oil reserves — barrels	18 143 000	17 619 000
Proven and probable gas reserves — mcf	28 738 000	27 489 000

Oil & Gas Properties:

Gross acres, including royalty interests	258 905	244 879
Net acres	43 027	35 380

Wells drilled:

Gross	35.0	33.0
Net	17.8	15.7

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to our shareholders:

The fiscal year ended August 31, 1977 reflects significant improvement in operations, expansion of production capacity, diversification of land holdings, important progress in the Kitscoty heavy oil fireflood recovery project and, of particular significance to your Company, the governments' attitude toward the marketing and future potential of heavy crudes in the energy requirements of Canada, including consideration of upgrading facilities for heavy oil.

These developments were very encouraging and strengthen management's determination to meet your Company's goals and objectives, which are to:

- pursue development of early production from all Company properties.
- continue development of the Company's heavy oil capability as this resource becomes a more important factor in the future supply of energy.
- seek diversification in resource activities, thereby reducing the Company's sensitivity to the markets for heavy oil.

This annual report consolidates operations of the parent company, its wholly-owned subsidiaries and its 75 percent interest in Vanalta Resources Ltd.

Oil and gas exploration, development and production are carried on by the parent company, Hidrogas Limited, Pet Chem Distributing Ltd. and Vanalta Resources Ltd.

We draw to your attention the review of operations in this report where a more detailed description of the activities of your Company and statistical and other data are discussed.

Financial

Despite the effects of marketing restrictions on the export of heavy crudes during the first and second quarters and restricted gas production during the third and fourth quarters of our fiscal year, Company operations reflect considerable improvement over the previous year. Gross revenues increased to \$4,399,000, 15 percent over the previous year, and net income before extraordinary items increased 53 percent to \$372,000 or 13 cents per share on the basis of 2,853,939 shares outstanding. Net income was \$439,000 or 16 cents per share compared to the

previous year's net loss of \$315,000 or 12 cents per share after extraordinary deductions of \$558,000 in that year. Cash flow from operations increased 35 percent to \$944,000 or 34 cents per share, an increase of \$246,000 over the previous fiscal year which included \$137,000 of additional cash flow from extraordinary 1975 underproduction received from the operator of the fireflood project at Kitscoty.

Quite significantly, the fourth quarter produced net income before extraordinary items of \$212,000 or 8 cents per share and cash flow from operations of \$365,000 or 13 cents per share. These fourth quarter results are a direct reflection of the National Energy Board decision to licence heavy crude oil separately for the export market.

The balance sheet reflects arrangement of a production loan of \$7,000,000 and repayment of debentures and elimination of potential dilution of shareholders' equity as a result of provisions attached to debentures and conversion rights. Expenditures on exploration and development totalled \$2,135,000 during the fiscal year, an increase of 78 percent over \$1,200,000 incurred in the prior year. Although working capital showed a deficiency of \$227,000 at year-end, \$850,000 was available but not drawn down on the production loan.

Operations

Oil production and sales revenues were below expectations and below the Company's capacity because of some unusual conditions and government actions affecting the first half of the fiscal year.

As part of its program of controlling exports of oil, the Canadian government severely limited shipments to the United States without considering that heavy oil merited special attention. Refineries in Canada that purchase this crude are not designed to use all of the heavy crude produced in Canada. As a result, the government announced that heavy oil producers would be permitted to export as much surplus production as specially-designed U.S. refineries required. The National Energy Board projects that production surplus to Canadian needs will persist through 1981.

This policy includes encouragement to develop a large production capability, sufficient to supply planned upgrading plants in Canada which could treat Lloydminster and other heavy crude oil for use in existing Canadian refineries. It is expected

that such a plant will be operating in the 1980's when Canadian heavy crudes may be displaced from the U.S. market.

These market conditions have been sorted out and by the fourth quarter Company production was at its full capability of 1 200 working interest barrels daily. This policy decision is permitting the Company to significantly expand the development of its heavy oil capability. Barring unforeseen obstacles, working interest production in the current fiscal year should reach 475 000 barrels.

Growth in natural gas sales has been limited by operating problems which required the custom processing plant at Coleman to be shut down for repairs during part of the third and fourth quarters and by conditions in Alberta as a result of the excellent success the industry has enjoyed in finding and developing new reserves. A temporary surplus has limited opportunities to sell gas. This is expected to be resolved since energy needs in Canada and the U.S. require these supplies.

Another important factor acting on your Company's activities and the industry is the governments' policy of raising prices of oil and gas towards prevailing world prices. During the fiscal year the price received for heavy crude rose from \$7.57 to \$9.34 a barrel and natural gas prices paid the Company went from \$1.10 to \$1.26 an mcf. After allowing for government taxes and royalties, producers receive a portion of these increases.

Oil reserves and gas reserves increased after deducting 1977 production, and proven and probable reserves of both oil and gas would support production for 38 years on the basis of current capacity. At year-end the Company's proven and probable reserves had a present worth value discounted at 12 percent of \$38,400,000 before tax and \$26,500,000 after tax. Proven reserves alone represented 88 percent of these values.

Capital expenditures increased substantially to \$2,304,000 from \$1,354,000 as the Company expanded its development programs in an orderly manner. These expenditures included additions to equipment and participation in drilling 35 gross wells of which 31 wells were completed as oil or gas wells and one was completed as a service well. Following the period of consolidation of land holdings and interests which resulted in last year's reduction of acreage, we have initiated a careful program of broadening acquisitions.

This broadening of activity has included acquiring positions in northeastern British Columbia and northwestern Alberta where immediate markets are available for either gas or oil production. The first well drilled in the Red Creek area of British Columbia is classified as a suspended gas well. However, two subsequent wells were abandoned after testing non-commercial gas. Since the end of the fiscal year, Vanalta participated in a well at Burnt River that was cased and tested gas. Information on these wells will be kept confidential since opportunities exist to acquire additional land interests in the areas.

As well as expanding activities into British Columbia, the Company has expanded its heavy oil activities into Saskatchewan to consolidate and strengthen our position. The Company acquired a 100 percent interest in 2 240 acres during the fiscal year and an oil well at Aberfeldy was drilled and brought into production. The contribution and impact of heavy oils both for future profits to the Company and future energy supplies for the country is being recognized more and more by the various governments and industry, and the emphasis in these areas by our Company is expected to contribute significantly to both short-term and long-term growth.

Lloydminster continues to be the production base of the Company and with the export demand for heavy crudes, governments and industry concerns for oil supply, together with several announcements of plans for upgrading plants, the future looks bright for our heavy oil position. With the much-improving business climate and need for energy, the Company has commenced a very active plan for immediate drilling and development of its heavy oil reserves. The majority of the drilling on Company lands during the fiscal year and since was at Lloydminster and is discussed in detail in the review of operations in this report.

The Future

The Canadian oil and gas industry undoubtedly is the most exciting area of business activity in the nation. Generally sound government policies are replacing the confusion of the past few years.

Canada's energy requirements, and, indeed, the energy needs of the United States, underlies the need to find and develop additional supplies.

Canadian Hidrogas has worked towards strengthening its ability to be an important and growing part of this growing industry.

Here are some of the key considerations expected to affect the affairs of your Company:

- Prices of both oil and natural gas will increase this year. Two price adjustments have already been put in place in the current fiscal year. A third is to occur this month.
- Exports of heavy oil to the U.S. are rising. U.S. refinery demand exceeds the ability of heavy oil producers in Canada by some 20 000 barrels daily more than is presently being produced.
- Our entry into the northeastern British Columbia area has a special importance since there is an immediate market for oil and gas production in that province while markets for gas and light and medium oil are temporarily limited in Alberta. We have an interest in suspended gas wells at Red Creek, B.C. and at Burnt River, Alberta that can reach the supply-short B.C. market. We expect to expand efforts in B.C. and that five or more wells will be drilled on Company interest acreage in 1978.
- The thermal recovery project at Kitscoty is achieving the success anticipated. More wells are to be ignited during the current year. Further experience in controlling this technology, together with a full-scale evaluation of results later this year, is the next stage. In addition to the 680 gross acres (600 net acres) contributed to this project, the Company has 13 900 gross acres (10 400 net acres) in the Lloydminster field and similar heavy oil areas in which in situ recovery can be applied when success of the fireflood is confirmed. In excess of 200 million barrels of heavy oil-in-place underlie these holdings. If recovery is increased from about 7 to 10 percent by conventional production methods to 30 percent over a prolonged life, as expected, such projects will be an ideal source of production for upgrading plants.
- Heavy oil producers planning construction of upgrading plants have reached the stage of serious discussion with governments and planning of financing. While it is impossible to forecast when such a project might be started, it is important to realize that the single plant planned by the group in which the Company is participating would require availability of a minimum of 30 000 barrels of additional daily production from all Lloydminster operators. Regardless of which plant proceeds first, all Lloydminster production dedicated to upgrading is likely

to be processed in the plant that goes ahead. The success of these endeavours would be a significant breakthrough for the Company and for the energy requirements of Canada.

The management group has been strengthened to take maximum advantage of the perceived opportunities. From an excellent base of the Company's Lloydminster holdings and production, additional interests have been acquired and developed to give the Company more diversified sources of revenue and geographical representation. This policy will be pursued by working towards increased natural gas revenues, looking for opportunities in lighter grades of oil, and by undertaking activities to continue to seek new opportunities to further expand the scope of the Company.

At Lloydminster, development will occur as opportunities arise. We will be working in two directions: developing our large category of over 8 million barrels of Company interest probable reserves into proven and producing; and expanding the potential of the properties through the application of the fireflood recovery method.

Your Company has been planning an expanded program for Lloydminster. The economic prices prevailing for production, the availability of property meriting development drilling, and the growing interest of sources of finance in participating in sizeable projects to develop known oil sources provide opportunities to accelerate the sound growth of your Company.

Results for the fourth quarter best reflect the anticipated operations for the current year. In that quarter, cash flow from operations totalled \$365,000 and net income was \$212,000. The Company expects the consolidated cash flow to exceed \$1,400,000 in the forthcoming fiscal year, net income to reach \$800,000 and gross revenues to exceed \$6,000,000.

The Company's management is pleased with the progress of this past year and acknowledges the contributions of our employees whose dedicated efforts, together with the improving investment climate for our industry, are permitting the Company to begin to achieve its goals.

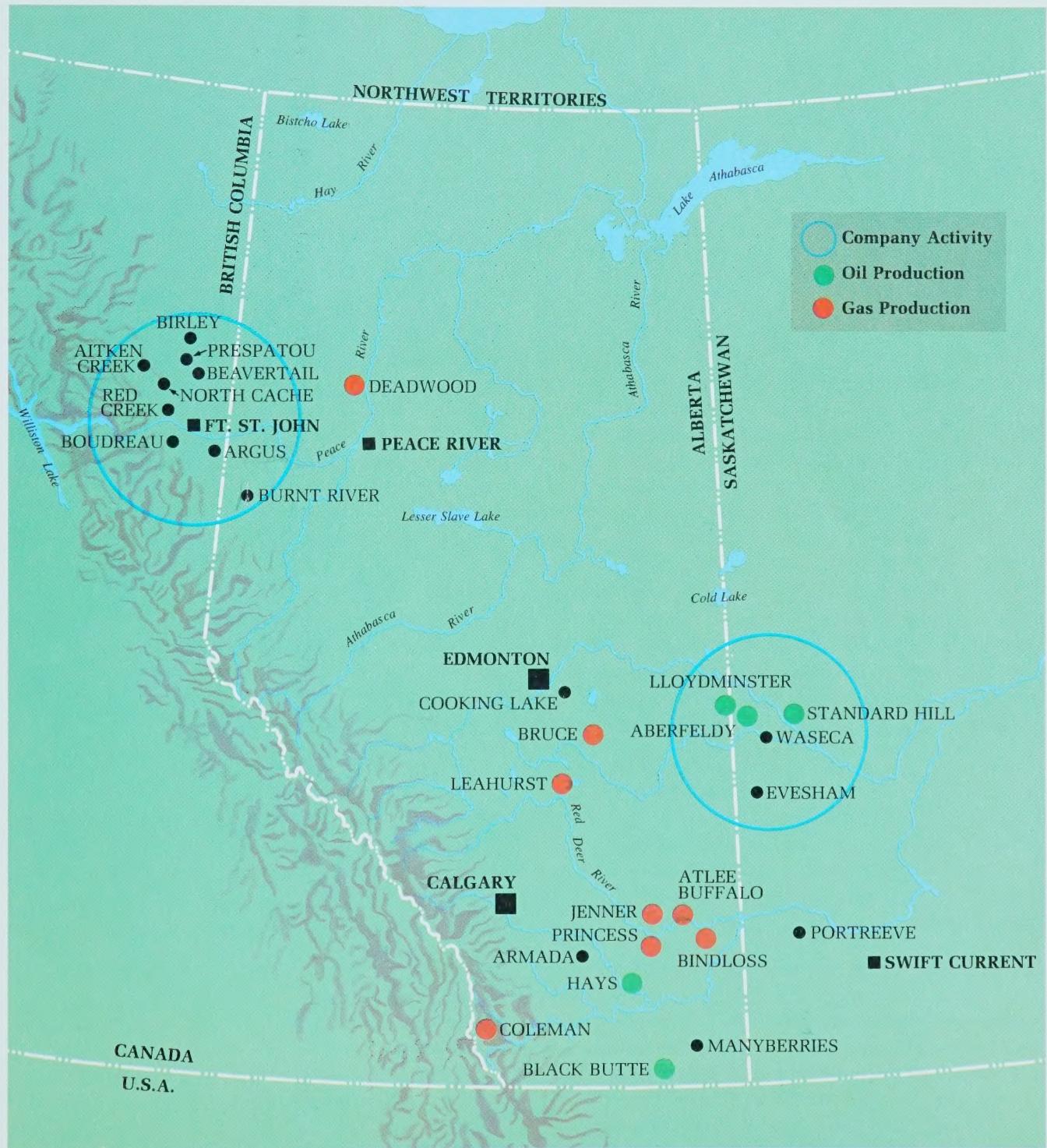
Respectfully submitted



R. E. McLennan
President

February 6, 1978
Calgary, Alberta

company areas of activity





financial review

Earnings

Net income before extraordinary items increased to \$372,000 or 13.5 cents per share for the fiscal year, an increase of 53 percent over the previous year. After extraordinary items of \$67,000, net income was \$439,000 or 15.9 cents per share — a \$754,000 improvement over the \$315,000 loss recorded the previous year after extraordinary deductions of \$558,000.

It should be noted that net income before extraordinary items was \$212,000 during the fourth quarter, an increase of 32 percent over the first three quarters of the year. This improvement is a result of increases in crude oil production in the quarter and higher wellhead prices being accorded the producer.

Very significant to our shareholders, the Company avoided potential dilution of shareholders' equity by cancellation of a stock option with a debenture holder and the termination by redemption of the 9% convertible debenture. However, the potential dilution, which could have resulted in the issuance of 990,000 shares of the Company, resulted in an extraordinary loss of \$100,000. This was offset, nevertheless, when an extraordinary gain of \$167,000 was realized upon recognition of deferred income taxes recoverable by a subsidiary company on utilization of a loss carry-forward.

Cash Flow

Cash flow from operations increased \$246,000 to \$944,000 or 34 cents per share, an increase of 35 percent over the previous year. Significantly, cash flow from operations during the fourth quarter was \$365,000, representing 39 percent of cash flow from the fiscal year.

Revenues

Total revenues amounted to \$4,399,000 in the current fiscal year, up 15 percent from \$3,813,000 in the previous year. This increase resulted from higher wellhead prices, increased natural gas production but lower crude production. Crude oil sales were lower as a result of export restrictions during the first quarter of the year which also

affected production well into the second quarter. New development in the third and fourth quarters, after spring breakup when men and equipment returned to the Lloydminster area, was unable to make up the production lost during the period of restrictions.

Expenses

Operating expenses increased \$79,000 over the previous year reflecting escalation in costs of materials and services, expanded production activities, and additional field personnel.

General and administrative expenses increased \$161,000 primarily reflecting additional administrative personnel and general inflationary pressures.

Interest expense on long-term debt increased \$139,000 as a result of increased borrowing and, to a lesser degree, higher interest rates over the previous year.

Depreciation and depletion increased \$73,000, largely due to higher unit of production charges to income, resulting from additional capital expenditures incurred late in the fiscal year.

Financial Position

Working capital decreased from \$167,000 at the beginning of the fiscal year to a deficiency of \$227,000 at August 31, 1977. This resulted from expenditures on property and equipment totalling \$2,304,000 which exceeded by \$395,000 funds generated from operations, net additional long-term debt taken down, and funds received when certain stock purchase warrants were exercised. However, the Company had \$850,000 of funds available but not drawn down on its production loan which could be used for additional opportunities and working capital as required.

The Company is presently finalizing its 1978 capital program and expects to conclude arrangements for additional long-term funds early in 1978.

review of operations

PRODUCTION

	Fiscal Year		
	1977	1976	1975
	barrels		
Crude Oil Production,			
Lloydminster	371 000	400 000	254 000
Other	10 000	10 000	9 000
Yearly total, barrels	381 000	410 000	263 000(1)
Daily average, barrels per day	1 045	1 125	720
<hr/>			
mcf			
Natural Gas Production,			
Coleman	307 000	284 000	—
Princess	195 000	172 000	20 000
Other	100 000	91 000	69 000
Yearly total, mcf	602 000	547 000(1)	89 000
Daily average, mcf per day	1 650	1 500	245

(1) Revised 1976 figure

The above table sets out the Company's working interest production, before deduction of royalties, for our major producing areas. The locations of all producing properties are shown on the index map. Except for minor oil deliveries towards the end of the fiscal year at Aberfeldy, on the Saskatchewan side of the border near Lloydminster, all of the production came from Alberta.

Oil

The Lloydminster heavy oil properties produce essentially all of the Company's oil. The other oil production shown on the table was from South Hays and Black Butte.

Mainly because of government regulations limiting access to the U.S. market in the first half of the fiscal year, production was below capacity. These regulations have been altered to assure heavy oil producers of access to U.S. refineries capable of processing this oil where production is surplus to Canadian needs. National Energy Board projections show such a surplus situation will persist through 1981.

It is estimated that demand for heavy oil currently exceeds the supply by some 20 000 barrels per day. All available Canadian output is being taken up immediately.

Canadian Hidrogas has a capability to produce 1 300 working interest barrels daily, or an annual rate of some 475 000 barrels. This capacity is being increased in an orderly and planned program of development of Lloydminster reserves.

In the fiscal year, the average wellhead price received by the Company for a barrel of oil was \$8.12 at Lloydminster, which included the weighting due to the 30 cent increase in January 1977 and the July 1, 1977 price increase from \$8.34 to \$9.34 per barrel. The price was increased again to \$10.34 per barrel on January 1, 1978. As has been announced by the Federal government and the government of the Province of Alberta, prices are to increase further. The basic price is scheduled to rise \$1.00 per barrel on July 1, 1978 and a further \$1.00 per barrel on January 1, 1979.

Natural Gas

North Coleman and Princess accounted for 80 percent of the Company's natural gas production during the fiscal year. The other gas production shown on the table was from Bruce, Leahurst, Atlee-Buffalo, Jenner, and Vanalta's production at Bindloss and Deadwood.



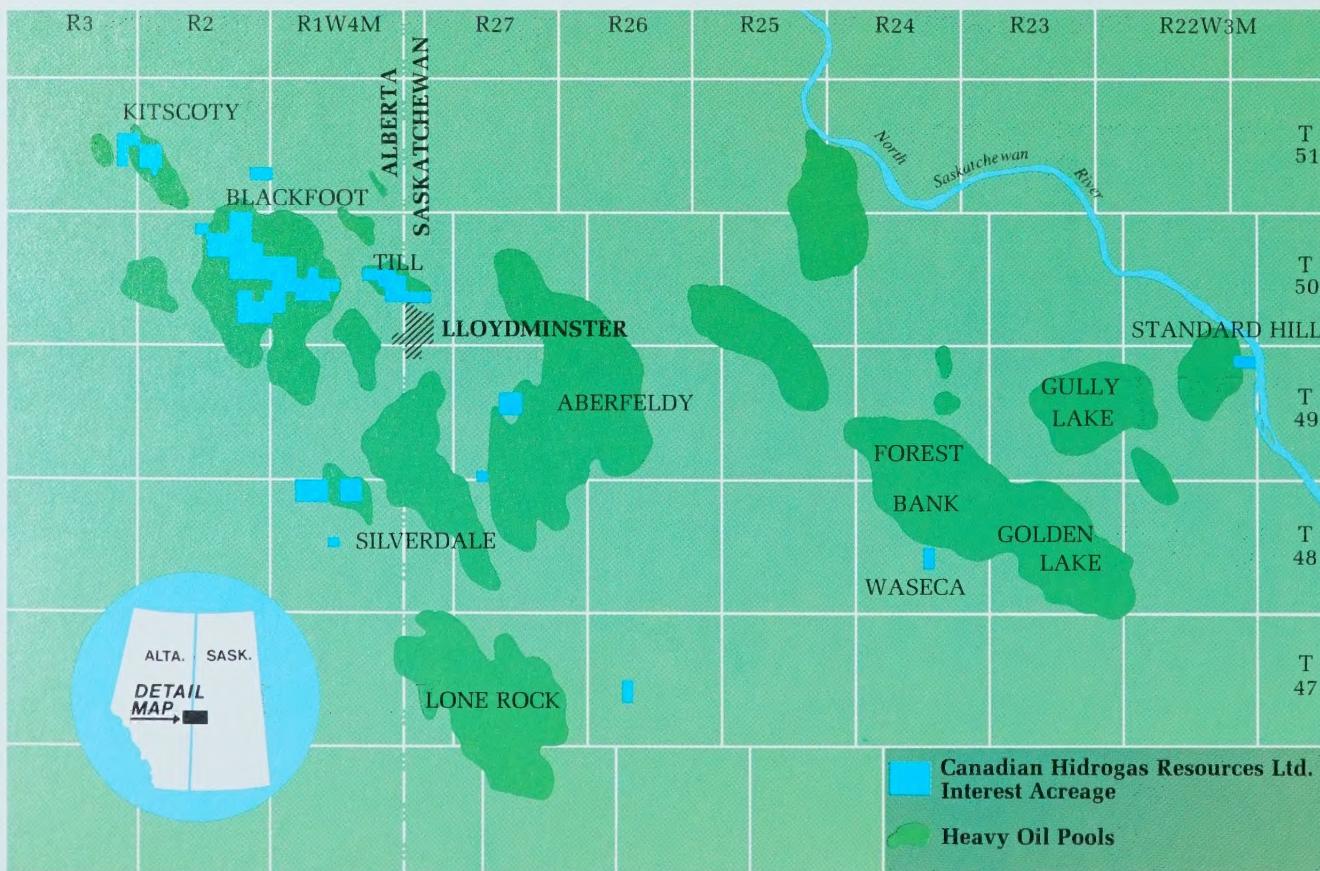
Although gas production increased to 602 000 mcf during the fiscal year, a larger improvement was expected. The custom processing plant at Coleman had to be shut down for repairs which caused the North Coleman field to be shut-in for much of the third quarter and part of the fourth quarter. The surplus gas situation in Alberta also resulted in some curtailment of production to minimum contract requirements, as well as hampering efforts to connect additional reserves. While temporary gas marketing problems exist in the province, your Company has been fortunate to have the majority of its production capacity under firm contract.

The acceleration in exploration and development activity, prompted by higher prices and government encouragement, has been most successful in building the province's natural gas reserves. This has caused the temporary glut which will be resolved as new arrangements are

made. Overall, shortages continue in the United States and Canada.

Prices of natural gas were increased on August 1, 1977 and are to be increased again on February 1, 1978 according to the agreement reached between the Federal government and the government of Alberta. The Toronto city gate price for gas is scheduled to rise 17 cents to \$1.85 per mcf in February.

The Company obtained an average price of \$1.18 per mcf during the fiscal year. After the August, 1977 increase, the Company received an average price of \$1.36 per mcf in September. In October the price was adjusted to account for the United States - Canadian dollar exchange rate which was passed on to the producer. The Company received an average price of \$1.48 per mcf since the adjustment.



LLOYDMINSTER

The accompanying map shows the Lloydminster heavy crude oil area which straddles the Alberta - Saskatchewan border.

Late in 1973, the Company acquired 100 percent interest in 7 600 acres of heavy oil lands on the Alberta side of the border. Subsequent to that time, additional holdings have been obtained and as opportunities arise, further interests are being acquired.

At August 31, 1977 the Company held 13 978 gross acres (10 345 net acres) in the area. Of this, 11 738 gross acres (8 105 net acres) were in Alberta at Kitscoty, Blackfoot, Till and Silverdale. A further 2 240 gross acres (2 240 net acres) were in Saskatchewan at Aberfeldy, Evesham, Lone Rock, Standard Hill and Waseca. All areas are located on the detailed map except Evesham which is to the south and shown on the index map.

During the fiscal year 880 gross acres (504 net acres) in Alberta and all of the Saskatchewan properties were acquired. Since August 31, 1977, 480 acres were purchased in Saskatchewan — 320 acres at Till and 160 acres east of Silverdale; and 160 acres were purchased in Alberta south of Silverdale — all 100 percent.

At August 31, 1977 the Company had an interest in 211 productive oil wells, 11 service wells and 7 gas wells. The Company operated 145 oil wells, 7 gas wells and 7 service wells — 51 oil wells and 1 gas well where we have an overriding royalty; and 94 oil wells, 6 gas wells and 7 service wells where we have a working interest. Of the working interest wells, the Company has a net interest of 91 oil wells, 6 gas wells and 7 service wells. The remaining non-operated wells are all at Kitscoty and include 63 unit and 3 non-unit oil wells, and 4 service wells — the 4 air injection wells operating in the "fireflood" at that time.

During the fiscal year the Company drilled 24 wells — 20 oil wells (8 royalty interest and 12 working interest) which resulted in 11.5 net oil wells; 2 gas wells (2 net gas wells); 1 service well (1 net service well) and 1 dry hole (1 net dry hole). At Kitscoty 12 oil wells and 2 dry holes were drilled by the operator which resulted in no net

wells. Since the end of the fiscal year the Company drilled 21 wells — 19 oil wells (10 royalty interest and 9 working interest) which resulted in 8.5 net oil wells; 1 service well (1 net service well) and 1 dry hole (1 net dry hole).

Of the wells drilled during the fiscal year, 1 well (1 net oil well) was brought into production at Aberfeldy in Saskatchewan. All other development drilling activity was in Alberta. Of the wells drilled since year-end, 1 well (1 net oil well) was drilled at Standard Hill and a dry hole (1 net dry hole) was drilled at Aberfeldy — the only drilling in Saskatchewan.

The success ratio is high since this development drilling is in a well-established and proven area. Only 4 wells were dry of a total of 59 wells drilled. About one-third of the Company's properties in Lloydminster are considered developed.

While the Company's present land holdings in the Lloydminster area appear modest, at some 14 600 gross acres (11 000 net), the oil known to underlie this acreage is of major significance. The independent analysis of the Company's oil reserves gives Canadian Hidrogas working interests in Lloydminster a total of almost 18 million barrels proven and probable. This is the equivalent of 14.9 million barrels net after deducting royalties.

Such reserve calculations represent only a small fraction of the total oil underlying the area since, by definition, reserves are the quantities considered recoverable economically. It is likely that in excess of 200 million barrels of heavy crude underlie your Company's Lloydminster land holdings.

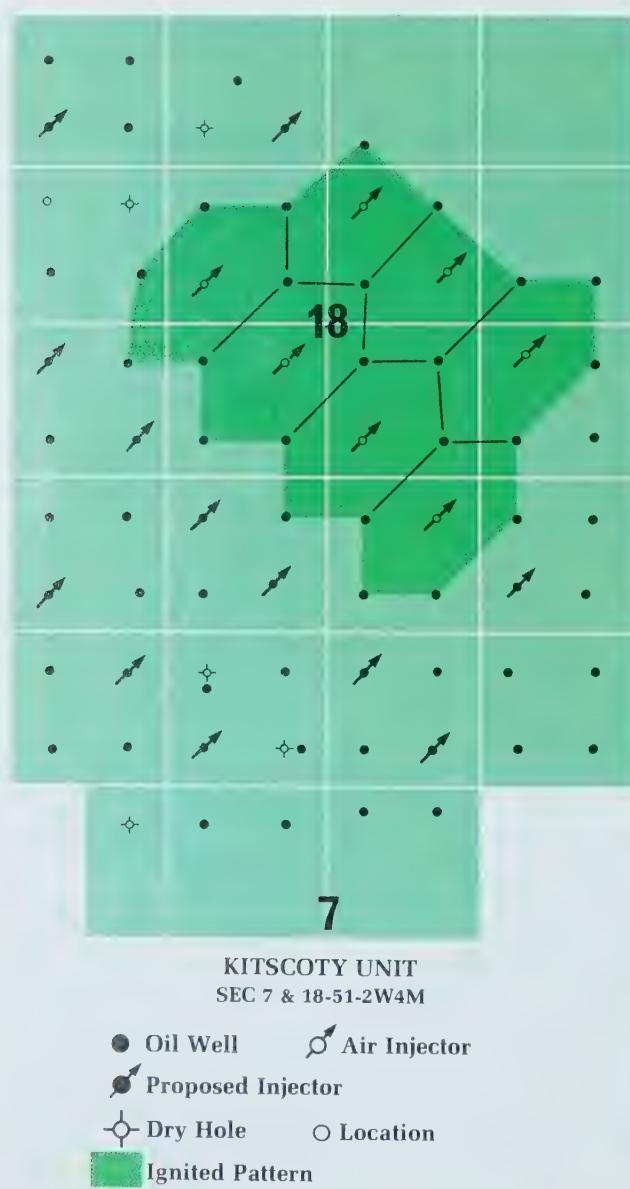
Participation in a program to improve the proportion of this heavy oil which can be recovered economically is a key activity in the long-term future of the Company.

Canadian Hidrogas has provided 600 net acres for the Kitscoty Unit Thermal Project which embraces a total of 900 acres. The technology being applied is the "fireflood" method successfully used in California. The illustration in this report is an artist's representation of how thermal recovery works. Wells are drilled in a carefully-planned pattern — on 10-acre spacing at Kitscoty, with a well centred on each 10-acre spacing unit. After



the wells are drilled, an optimum grouping of wells is selected for maximum oil displacement. Groups of seven wells were chosen, a "seven-spot" pattern, in which every third well is an injector. In each group a central air injector is surrounded by six producing wells, with common producing wells forming the boundaries between each group called a pattern.

A controlled flow of air is injected to maintain carefully-balanced conditions in order to achieve ignition and maintain combustion in the reservoir. The heat from combustion increases the temperature in the reservoir, which lowers the viscosity of the heavy oil and improves the



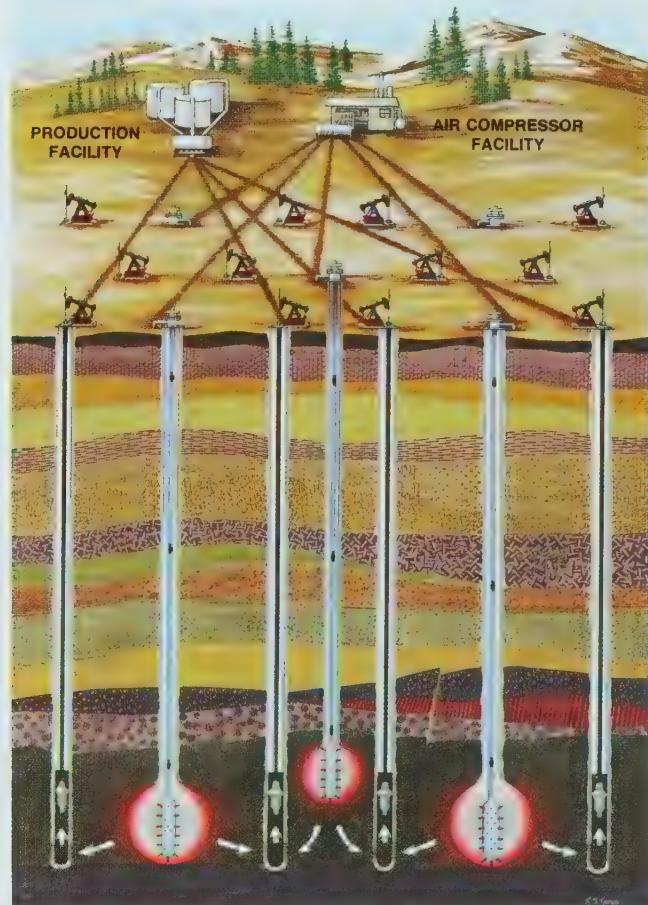
displacement or flow of oil to the production wells where it is pumped to the surface.

The first four patterns were ignited by the end of the 1977 fiscal year. Three more patterns were ignited late in 1977 and currently seven patterns are operating and twenty-three of the sixty project producing wells are involved. The project production has been maintained at about 1 100 barrels a day with no noticeable long-term change in production rate as producers were converted to air injectors.

The pattern of development and broadening out of the Kitscoty project calls for ignition of an additional 4 wells in June 1978.

So far no major problems have occurred in applying the recovery enhancement technique developed in California. A full evaluation of the method as it might continue to be applied on an even larger scale in Lloydminster likely will be possible later in the year.

ILLUSTRATED METHOD OF FIRE FLOOD RECOVERY



Significance of this method both to the Company and to Canada's oil reserve picture can be appreciated when it is realized that recovery more than tripled in the California application. Normal recovery methods are expected to bring 7 to 10 percent of the oil-in-place. Thermal recovery may bring up 30 percent over a prolonged life, resulting in a dramatic rise in oil reserves.

The Canadian oil industry is placing increasing emphasis on such technology. Our participation in the Kitscoty project fits in with our participation in a project to build a plant to upgrade Lloydminster heavy oil to a quality permitting shipment to Canadian refineries. A detailed feasibility report has been prepared for an upgrading plant on behalf of the 22 sponsoring

companies. This 600 million-dollar project is being discussed with governments.

The decision by government authorities to permit an increasing export of heavy crude oil to those specially-designed U.S. refineries which traditionally buy a substantial proportion of Lloydminster production is a key element in working towards a growing production and role for heavy crude within Canada. This industry now is in a position to accelerate development drilling, looking towards the day when a sufficient production flow will be made available to supply the large 100 000 barrels a day requirement of an upgrading plant.

In effect, a single such treatment plant would require a tripling of the present rate of total production from the Lloydminster district.

RESERVES

	August 31, 1977		August 31, 1976	
	Company Interest(1)	Company Net(2)	Company Interest(1)	Company Net(2)
	thousand barrels			
Oil				
Proven and Producing(3)	3 486	2 899	3 343	2 737
Proven, not Producing	6 252	5 174	6 236	5 177
Total Proven	9 738	8 073	9 579	7 914
Probable (4)	8 405	6 908	8 040	6 493
Total Oil	18 143	14 981	17 619	14 407
Gas				
Proven and Producing(3)	17 178	10 168	19 254	11 048
Proven, not Producing	8 720	5 066	6 380	3 510
Total Proven	25 898	15 234	25 634	14 558
Probable(4)	2 840	1 633	1 855	1 059
Total Gas	28 738	16 867	27 489	15 617
Present Worth Value discounted at 12%				
Before tax	\$38,356,000		\$30,032,000	
After tax	\$26,525,000		\$20,954,000	

(1) before deduction of royalties
(2) after deduction of royalties

(3) currently being produced
(4) no adjustment made for risk

The table summarizes detailed reports on reserves of Canadian Hidrogas and Vanalta Resources as of August 31, 1977 prepared by recognized



independent consultants. A summary prepared from last year's reports is included for your information.

Accelerating development of interests in the Lloydminster area is reflected by an increase in Company interest proven and probable oil reserves of 524 000 barrels to 18 143 000 barrels, after production of 381 000 barrels during the 1977 fiscal year. This reserve would support continuing production for 38 years on the basis of current capacity of 475 000 barrels annually.

The rise in Company interest proven and probable natural gas reserves to 28 738 000 mcf after production of 602 000 mcf is primarily the result of successful drilling during the fiscal year. This reserve at August 31, 1977 would support continuing production for 38 years on the basis of current capacity of 750 000 mcf annually.

In addition to the oil and gas reserves presented in the table, 70 700 long tons of sulphur will be produced as a by-product from the Company's gas reserves at North Coleman.

The table also shows the more than 25 percent increase in present worth is greater proportionately than the rise in reserves. This reflects the higher prices prevailing for oil and gas.

DEVELOPMENT AND EXPLORATION

A carefully-planned expanded program of activity in development drilling, exploration participations, and land acquisition was carried out in the fiscal year and is continuing this year.

Highlights include:

- A total of 51 wells were drilled on Company interest land during the fiscal year. The Company participated in 35 gross wells for a net 17.8 wells. This compares with participation in 33 gross wells equal to 15.7 net wells in the previous year.

The consultant's appraisals indicate the Company's properties at August 31, 1977 are capable of producing an undiscounted "net production revenue" from proven reserves alone of more than \$102 million with a present worth value discounted at 12 percent of more than \$33 million before tax and more than \$23 million after tax. "Net production revenue" is income derived from the sale of net reserves of oil, gas and gas by-products less all capital and operating costs.

"Proven reserves" are considered to be those reserves that, to a high degree of certainty, would be recoverable at commercial rates under present producing methods and current operating conditions, prices and costs.

"Probable reserves" are considered to be those reserves commercially recoverable as a result of the beneficial effects which may be derived from the future institution of some form of pressure maintenance or other secondary recovery method, or as a result of a more favourable performance of the existing recovery mechanism than that which would be deemed proven at the present time, or those reserves which may be reasonably assumed to exist because of geophysical or geological indications and drilling done in regions which contain proven reserves.

- A total of 66 wells have been drilled on Company interest land since the end of the fiscal year. The Company participated in 29 gross wells for a net 12.3 wells.
- An expansion of Company activities into northeastern British Columbia. The Company acquired 26 597 gross acres (6 639 net acres) in British Columbia during the fiscal year. In the Red Creek area near Fort St. John the Company had a suspended gas well at the end of the fiscal year.

- An expansion of Company heavy oil activities at Lloydminster into Saskatchewan. The Company acquired 2 240 gross acres (2 240 net acres) during the fiscal year and an oil well at Aberfeldy was drilled and brought into production.

The index map in this report locates the areas of Company activity. Areas of significant development and exploration are circled.

Resource Properties

	August 31, 1977		August 31, 1976	
	gross acres(1)	net acres(2)	gross acres(1)	net acres(2)
Oil and Gas Properties				
Alberta	114 578	28 155	129 389(3)	29 387
British Columbia	26 597	6 639	—	—
Saskatchewan	115 040	6 888	112 800(3)	4 648
Montana	2 690	1 345	2 690	1 345
Total				
Oil & Gas Acreage	258 905	43 027	244 879(3)	35 380
Alberta Coal Leases	1 280	1 280	1 280	1 280
TOTAL ACREAGE	260 185	44 307	246 159(3)	36 660

(1) includes royalty interest acres

(2) excludes royalty interest acres

(3) revised 1976 figure

Consolidated land holdings were 260 185 gross acres (44 307 net acres) at August 31, 1977. This compares with 246 159 gross acres (36 660 net acres) a year earlier.

The most significant change during the fiscal year is the entry into British Columbia. Your Company acquired 26 597 gross acres (6 639 net acres) in three areas of that province — Argus (Parkland), Boudreau and Red Creek. Since the end of the fiscal year, another 13 639 gross acres (11 530 net acres) have been purchased in five more areas — Aitken Creek, Beavertail, Birley, North Cache and Prespatou.

Activities of Vanalta Resources are included. The summary tables on drilling and resource properties have been consolidated on the basis of Canadian Hidrogas' 75 percent interest in that subsidiary.

On a consolidated basis, this is the position of the Company as of August 31, 1977. Interests are held in 215 gross productive oil wells, 111 gross productive gas wells and 12 gross service wells. The net interests are the equivalent of 92 oil wells, 14.3 gas wells and 7.3 service wells.

Activities in the Lloydminster heavy oil area are included in the summary table but reviewed more specifically in the Lloydminster section of this report. Acquisitions were also made at Armada, Manyberries and Hays during the fiscal year.

The two coal leases near Turner Valley were classified by the Alberta government during the fiscal year. They fall immediately inside the boundary delineating the category where no exploration or commercial development will be permitted. These leases have been retained.



Drilling

Fiscal Year Ending August 31, 1977

	Gross Wells(1)				Net Wells(2)			
	Oil	Gas	Service	Dry	Oil	Gas	Service	Dry
Alberta	31	11	1	4	10.50	3.51	1.00	1.06
British Columbia	—	1	—	1	—	0.33	—	0.33
Saskatchewan	1	1	—	—	1.00	0.10	—	—
Total	32	13	1	5	11.50	3.94	1.00	1.39

(1) includes royalty interest wells

(2) excludes non-working interest wells

Consolidated drilling activity during the fiscal year saw 51 gross wells drilled on Company interest land. The Company participated in 35 gross wells for a net 17.8 wells. During the prior fiscal year, the Company participated in 33 gross wells for a net 15.7 wells.

Although the Company did not participate in the drilling of 16 gross wells on Company interest acreage, it will receive revenue from production under certain agreements. Of these 16 wells, 12 oil wells and 2 dry holes were drilled at Kitscoty; a gas well was drilled at Cooking Lake; and a gas well was drilled at Leahurst. These wells result in no equivalent net wells to the Company.

The first well drilled in the Red Creek area of British Columbia is classified as a suspended gas well. The Company has a 33.33 percent working interest in the Red Creek 9-36-85-22 W6M well. Information on this well will be kept confidential pending the disposition of lands in the area. The second well in the area was abandoned during the fiscal year after testing non-commercial gas. A third well was abandoned and the rig was released on February 1, 1978 after testing non-commercial gas and water.

Drilling in the Lloydminster heavy oil area is included in the summary table but reviewed more

specifically in the Lloydminster section of this report.

At Princess 5 gross gas wells (1.2 net gas wells) were drilled during the fiscal year and 6 gross gas wells (1.5 net gas wells) have been drilled since fiscal year-end to utilize unused plant capacity that was available from other owners.

At Bruce 2 gross gas wells (0.31 net gas wells) and 1 dry hole (0.06 net wells) were drilled during the fiscal year.

All drilling activities involving Vanalta have taken place since the end of the fiscal year. In October, 1977, the Burnt River 10-36-76-11 W6M well was cased and tested gas. Information on the well will be kept confidential since opportunities exist to acquire additional land interests in the area. On a consolidated basis, the well results in 1 gross gas well equivalent to 0.11 net gas wells.

At Bindloss, 36 gross gas wells on Vanalta royalty interest acreage were drilled by the end of December, 1977 and a dry hole was drilled by a farmee under a farmout and pooling arrangement at Manning. These wells result in no equivalent net wells to the Company.

Auditors' Report

To the Shareholders of
Canadian Hidrogas Resources Ltd.:

We have examined the consolidated balance sheet of Canadian Hidrogas Resources Ltd. as at August 31, 1977, and the consolidated statements of income and retained earnings, and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, subject to the successful defense of the lawsuits described in Note 7, these consolidated financial statements present fairly the financial position of the company as at August 31, 1977 and the results of its operations and the changes in its financial position for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

November 23, 1977

DELOITTE, HASKINS & SELLS
Chartered Accountants



consolidated statement of income and retained earnings

For the year ended August 31, 1977 (with prior year figures for comparison)

	<u>1977</u>	<u>1976</u>
SALES AND OPERATING REVENUE	<u>\$4,399,181</u>	<u>\$3,812,844</u>
EXPENSES:		
Costs of sales and operating expenses	2,162,138	2,083,297
Selling, general and administrative expenses	672,347	511,119
Interest — on long-term debt	728,504	589,654
— on short-term debt	18,201	42,075
Depreciation, depletion and amortization	416,636	343,430
Minority interest in earnings of a subsidiary	5,435	2,885
Total expenses	<u>4,003,261</u>	<u>3,572,460</u>
INCOME BEFORE INCOME TAXES AND EXTRAORDINARY ITEMS	<u>395,920</u>	<u>240,384</u>
INCOME TAXES (Note 4):		
Deferred	202,506	167,676
Provincial rebates — current	(121,791)	(117,495)
— deferred	(57,173)	(52,974)
Net income taxes	<u>23,542</u>	<u>(2,793)</u>
INCOME BEFORE EXTRAORDINARY ITEMS	<u>372,378</u>	<u>243,177</u>
EXTRAORDINARY ITEMS (Note 5)	<u>66,824</u>	<u>(558,110)</u>
NET INCOME (LOSS) FOR THE YEAR	<u>439,202</u>	<u>(314,933)</u>
RETAINED EARNINGS AT BEGINNING OF THE YEAR	<u>138,639</u>	<u>453,572</u>
RETAINED EARNINGS AT END OF THE YEAR	<u>\$ 577,841</u>	<u>\$ 138,639</u>
EARNINGS (LOSS) PER SHARE (Note 8):		
Before extraordinary items	13.5¢	8.9¢
Extraordinary items	2.4¢	(20.5)¢
NET INCOME (LOSS) FOR THE YEAR	<u>15.9¢</u>	<u>(11.6)¢</u>

The accompanying notes are an integral part of the financial statements.

consolidated statement of changes in financial position

For the year ended August 31, 1977 (with prior year figures for comparison)

	<u>1977</u>	<u>1976</u>
WORKING CAPITAL PROVIDED:		
From operations	\$ 943,866	\$ 697,722
Additional long-term debt	2,150,000	4,389,200
Issue of capital stock	100,000	11,462
Proceeds on sale of other equipment	27,337	—
Total working capital provided	<u>3,221,203</u>	<u>5,098,384</u>
WORKING CAPITAL UTILIZED:		
Additions of gas, oil and mineral interests	2,135,319	1,199,824
Additions to transportation and other equipment	168,994	154,389
Paid or payable on long-term debt (including \$1,000,000 paid out of additional long-term debt)	1,311,417	2,908,559
Acquisition of shares of subsidiary company	—	22,500
Repurchase of capital stock	—	19,695
Net current assets of operations discontinued in prior year	—	943,784
Total working capital utilized	<u>3,615,730</u>	<u>5,248,751</u>
DECREASE IN WORKING CAPITAL	<u>394,527</u>	150,367
WORKING CAPITAL AT BEGINNING OF THE YEAR	<u>167,202</u>	317,569
DEFICIENCY IN (WORKING CAPITAL) AT END OF THE YEAR	<u>\$ 227,325</u>	<u>\$ (167,202)</u>

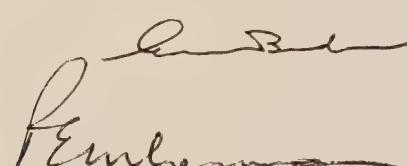
The accompanying notes are an integral part of the financial statements.

consolidated balance sheet

as at August 31, 1977 (with prior year figures for comparison)

	Assets	1977	1976
CURRENT ASSETS:			
Cash and short-term deposits	\$ 277,981	\$ 499,205	
Accounts receivable:			
Trade	1,090,177	675,799	
Provincial rebates	277,101	157,432	
Other	123,981	—	
Inventories — at the lower of average cost or net realizable value	270,899	298,639	
Prepaid expenses and deposits	38,656	37,414	
Marketable securities (market value \$58,250; 1976 — \$33,687)	42,062	29,562	
Total current assets	<u>2,120,857</u>	<u>1,698,051</u>	
PROPERTY AND EQUIPMENT:			
Gas, oil and mineral interests	10,019,437	7,862,317	
Transportation equipment	399,028	371,939	
Other equipment	234,932	165,478	
Total cost of property and equipment	10,653,397	8,399,734	
Less accumulated depreciation and depletion	931,584	582,867	
Net property and equipment	<u>9,721,813</u>	<u>7,816,867</u>	
DEFERRED FINANCING COSTS — net of amortization	<u>46,130</u>	<u>94,325</u>	

Approved by the Board:

 Director

 Director

TOTAL	<u>\$11,888,800</u>	<u>\$9,609,243</u>
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Liabilities and Shareholders' Equity

	<u>1977</u>	<u>1976</u>
CURRENT LIABILITIES:		
Bank indebtedness	\$ 761,581	\$ —
Accounts payable and accrued liabilities	1,275,746	1,309,236
Current portion of long-term debt	310,855	221,613
Total current liabilities	<u>2,348,182</u>	1,530,849
LONG-TERM DEBT — less portion included in		
current liabilities (Note 2)	7,060,957	6,222,374
DEFERRED INCOME TAXES	621,680	643,171
MINORITY INTEREST	77,819	72,384
SHAREHOLDERS' EQUITY:		
Capital stock:		
Authorized:		
5,000,000 common shares with a par		
value of \$1 each		
Issued and outstanding — fully paid (Note 3):		
2,853,939 shares (1976 — 2,723,139 shares)	1,027,784	896.984
Repurchased — 19,200 shares	—	(19,695)
Net capital stock issued	1,027,784	877,289
Contributed surplus — arising on issue		
of common shares	174,537	124,537
Retained earnings	577,841	138,639
Total shareholders' equity	1,780,162	1,140,465
TOTAL	<u>\$11,888,800</u>	\$9,609,243



notes to the consolidated financial statements

August 31, 1977

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

a) Principles of Consolidation:

The consolidated financial statements include the accounts of Canadian Hidrogas Resources Ltd., its wholly-owned subsidiaries, Hidrogas Limited, Hidrogas Incorporated, Pet Chem Distributing Ltd., Hidrogas Inc., and its 75% owned subsidiary, Vanalta Resources Ltd.

b) Full Cost Method of Accounting:

The Company follows the full cost method of accounting for its gas, oil and mineral interests whereby all costs of exploring for and developing oil and gas reserves are capitalized, and depleted or depreciated on a unit of production method, based on estimated proven oil and gas reserves determined by independent petroleum consultants.

c) Depreciation:

Depreciation of other equipment is computed under the declining-balance method at rates of 20% and 30%; transportation equipment is being depreciated on the straight-line basis, net of residual value to April 1, 1980. These rates are intended to amortize the costs of these assets over their estimated useful lives.

d) Financing Costs:

The Company follows the practice of capitalizing financing costs on issuance of long-term debt and amortizing such amounts on a straight-line basis over the term of the related debt.

e) Income Taxes:

The Company follows the tax allocation method of accounting for income taxes whereby deferred income taxes are provided to the extent that current income taxes otherwise payable have been eliminated by claiming capital cost allowances and exploration, development and lease acquisition costs in excess of the related depreciation and depletion provided for in the financial statements.

2. LONG-TERM DEBT:

Details of long-term debt are as follows:

	<u>1977</u>	<u>1976</u>
Production loan, interest at 1 ³ / ₄ % above prime rate of 8 ¹ / ₄ % at August 31, 1977, declining to 1 ¹ / ₂ % above prime rate July, 1978, at which time repayment commences in equal monthly instalments including interest, such that principal will be repaid on a graduated basis from 15% to 25% per year for 5 years	\$6,150,000	\$4,000,000
9% convertible debenture, due 1983, interest payable quarterly, convertible into common shares of the Company at the rate of 690 shares for each \$1,000 principal (Note 3)	—	1,000,000
12% debenture, maturing 1980, repayable at \$5,600 per month plus interest	826,400	893,600
Mortgage payable, non-interest bearing, repayable \$60,000 July 1, 1978 and \$54,000 July 1, 1979	114,000	179,000
12 ¹ / ₂ % chattel mortgage, repayable in equal monthly instalments of \$10,101 including interest, maturing March, 1980	272,412	350,387
Agreement payable, non-interest bearing, maturing 1978, repayable in monthly instalments of \$1,000	9,000	21,000
	7,371,812	6,443,987
Current portion of long-term debt	310,855	221,613
	\$7,060,957	\$6,222,374

The production loan which can be increased to \$7,000,000 as the funds are required, is secured by a first charge against certain gas, oil and mineral interests and an assignment of accounts receivable. The 12% debenture is secured by a floating charge on all assets of the Company and a fixed charge on certain gas, oil and mineral interests. The mortgage payable is secured by a second charge against certain gas, oil and mineral interests. The 12½% chattel mortgage is secured by certain transportation equipment.

Principal payments on long-term debt will be due as follows:

1978	\$ 310,855
1979	1,276,200
1980	1,851,424
1981	1,429,166
1982	1,750,000
1983	<u>754,167</u>
	<u><u>\$7,371,812</u></u>

3. CAPITAL STOCK:

Details of issued and outstanding capital are as follows:

	Number of Shares	At Par of \$1	Discount	Net	Contributed Surplus
Balance August 31, 1976	<u>2,723,139</u>	<u>\$2,723,139</u>	<u>\$1,826,155</u>	<u>\$ 896,984</u>	<u>\$124,537</u>
Issued:					
For cash on exercise of stock purchase warrants	50,000	50,000	—	50,000	50,000
On termination of stock option by a debenture holder	50,000	50,000	—	50,000	—
On termination and retirement of 9% convertible debentures ...	30,800	30,800	—	30,800	—
	<u>130,800</u>	<u>130,800</u>	<u>—</u>	<u>130,800</u>	<u>50,000</u>
Balance August 31, 1977	<u>2,853,939</u>	<u>\$2,853,939</u>	<u>\$1,826,155</u>	<u>\$1,027,784</u>	<u>\$174,537</u>

The Company has reserved 300,000 shares for issuance to officers and employees under a stock option plan. Options in respect of 155,000 shares have been granted at a price of \$1 per share and may be exercised to acquire up to 20% annually of the shares under option on a cumulative basis until 1979 on 35,000 shares, to 1980 on 35,000 shares and to 1981 on 85,000 shares. None of the stock options have been exercised to date.



4. INCOME TAXES:

The provision for income taxes is less than the amount which would result from applying the "normal" tax rate to income before income taxes and extraordinary items. The major factors affecting the tax provision are described below:

	1977		1976	
	Amount	Percent of Pre-Tax Income	Amount	Percent of Pre-Tax Income
Computed "expected" income taxes	\$ 186,083	47	\$ 120,192	50
Increase in income taxes				
resulting from:				
Royalties, lease rentals and mineral taxes payable to the Crown (non-deductible)	237,003	60	228,497	95
Less related provincial rebates	(178,964)	(45)	(170,469)	(71)
	58,039	15	58,028	24
Other	3,398	1	2,013	1
	61,437	16	60,041	25
Decrease in income taxes				
resulting from:				
Allowance for earned depletion	(35,402)	(9)	(21,648)	(9)
Resource allowance	(188,576)	(48)	(161,378)	(67)
	(162,541)	(41)	(122,985)	(51)
Actual income tax provision	\$ 23,542	6	\$ (2,793)	(1)

The income tax provision includes deferred income taxes resulting from differences in the timing of write-offs of certain expenditures for tax purposes and for financial reporting purposes. The amounts of deferred income taxes relating to the various timing differences are as follows:

	1977	1976
Arising from excess of exploration and development costs deductible for income tax purposes over depletion recorded in the financial statements	\$252,260	\$218,815
Arising from excess of depreciation recorded in the financial statements over capital cost allowance for income tax purposes	(49,754)	(51,139)
Deferred income taxes shown in statement of income	\$202,506	\$167,676

5. EXTRAORDINARY ITEMS:

Details of extraordinary items are as follows:

	<u>1977</u>	<u>1976</u>
Value assigned to 50,000 fully paid shares of the Company (19,200 comprising shares previously purchased by the Company) issued on termination and redemption of 9% convertible debenture (Note 3)	\$ (50,000)	\$ —
Value assigned to 50,000 fully paid shares of the Company issued on cancellation of stock option of a debenture holder (Note 3) ...	(50,000)	—
Recognition of deferred income taxes recoverable by a subsidiary company on utilization of a loss carry-forward	166,824	—
Loss on disposal of assets of operations discontinued in prior years — net of current income taxes of \$17,250 and deferred income taxes of \$385,674	—	(558,110)
	<u>\$ 66,824</u>	<u>\$(558,110)</u>

6. REMUNERATION OF DIRECTORS AND OFFICERS:

Remuneration of directors and senior officers of the Company amounted to \$153,820 (1976 — \$141,575). These amounts include the remuneration paid to the following:

	<u>1977</u>	<u>1976</u>
Directors who also serve as officers	4	5
Other employees, defined as senior officers under the Companies Act, British Columbia	3	2

7. CONTINGENT LIABILITIES:

- a) A former supplier has commenced an action against the Company and the U.S. Federal Energy Administration in the Federal District Court, District of California, seeking damages of \$896,000 (U.S.) resulting from prices paid for certain liquefied petroleum products purchased by the Company under the regulations of the U.S. Federal Energy Administration. The Company and its solicitors are of the opinion that the action can be successfully defended and no provision for this amount has been made in these financial statements.
- b) A subsidiary has been assessed by income tax authorities claiming \$333,000 in income taxes and interest. The subsidiary has appealed the assessments on the basis that tax returns, as originally filed were in accordance with the Income Tax Act. The income taxes of \$298,000 included in this assessment are included in deferred income taxes on the consolidated balance sheet; no provision has been made for interest of \$35,000 included in the assessment.
- c) The company is a defendant in various lawsuits with former employees and associates. While it is not possible to estimate the ultimate liability, if any, with respect to these lawsuits, management believes that there will be no material adverse effect on the financial position of the company.

8. EARNINGS PER SHARE:

Earnings per share have been calculated on the weighted average number of shares outstanding during the year. The potential dilutive effect of the stock options referred to in Note 3 is not significant.

Canadian Hidrogas Resources Ltd.
1977 Annual Report

